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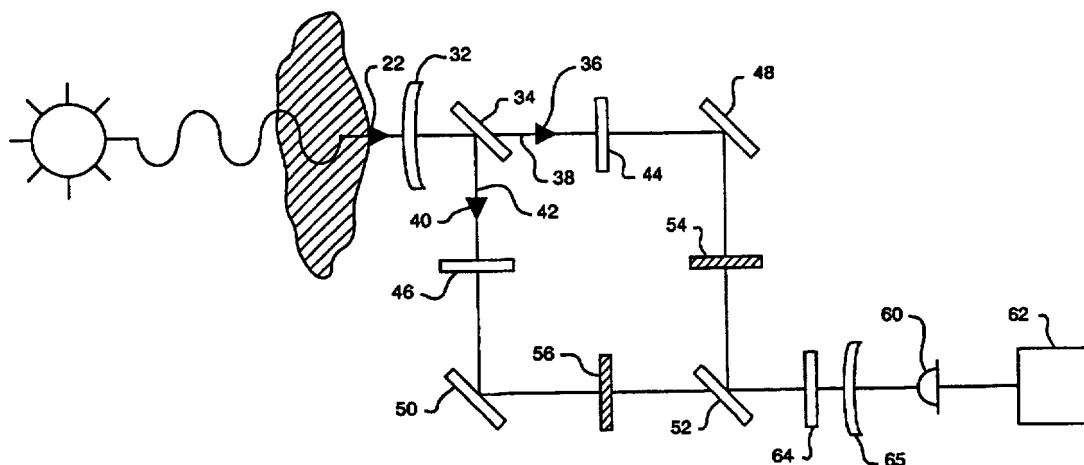
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(54) Title: PASSIVE REMOTE SENSOR OF CHEMICALS

**(57) Abstract**

A remote sensor for use as a handheld, mobile or stand-alone sensor has first (12) and second (16) optical paths, light collecting optics, a sample filter (10) assembly positioned in a first optical path (12), a reference filter (14) assembly positioned in a second optical path (16), a detector assembly to detect the filtered light or other radiation, and a detector output comparison device such as a BRD to minimize the effects of common background noise components, differences in light or other radiation source power, and absorption or emission by interfering species.